CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER NO. 97-101

REVISION TO SITE CLEANUP REQUIREMENTS AND
RESCISSION OF ORDER NO. 92-052 FOR:

LOMBARDO DIAMOND CORE DRILLING COMPANY, INC.,
AND GILMORE SUPPLY COMPANY

FOR THE PROPERTY LOCATED AT:
585 ROBERT AVENUE, SANTA CLARA
SANTA CLARA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region (hereinafter called the Board) finds that:

SITE LOCATION

1. The Site consists of property at 585 Robert Avenue in Santa Clara, in an area used exclusively for industrial purposes. Lombardo Diamond Core Drilling Company, Inc. (hereinafter referred to as Lombardo) owns and has used and currently uses the two-acre (approximately) Site only for parking and storage of vehicles, heavy equipment and supplies, used in its concrete-cutting business. The only structure currently on the property is a warehouse in the eastern, reportedly unaffected, portion of the Site. A former industrial manufacturing facility on the Site was demolished in 1987.

SITE HISTORY

2. Lombardo Diamond Core Drilling Company, Inc. (Lombardo) purchased the property from Gilmore Supply Company in April of 1985 and began use of it at that time. Soil- and groundwater-pollution by metals had been identified before Lombardo purchased the property, and are suspected to have resulted from the operation of a galvanizing facility which existed previously at this location.

3. During the 1960s and 1970s the former property owner, Gilmore Supply Company, had leased the property to occupants who operated a galvanizing facility at the Site. It is believed that a galvanizing facility was in operation until approximately 1981, and that waste pickling and washing solutions may have been discharged on-site.

DISCHARGERS NAMED

4. Lombardo (Lombardo Diamond Core Drilling Company, Inc.), the current property owner, is named the Primary Responsible Party for Site remediation. Previous Site owners and occupants reportedly operated a galvanizing facility at this location, and most likely contributed to Site pollution. Lombardo did not operate a galvanizing facility or engage in any other manufacturing or industrial activity at this Site, but purchased the property after pollution had been identified.

The existing Order identified Lombardo, Metal Coatings Co. *et al*, and Gilmore Supply Co. as Dischargers, but named only Lombardo as responsible for Site cleanup because addresses of the other entities were not known. It was anticipated that the Order would be amended when the other companies had been located. Lombardo, through investigation, determined and reported to the Board in late 1992 the current addresses of aforementioned companies. Subsequently, Lombardo informed the Board that it wanted to proceed with Site remediation and did not (at that time) wish to pursue an action to name other Dischargers.

However, the Board herein names Gilmore Supply Company as Secondary Responsible Party and responsible for compliance only if the Board or Executive Officer finds that the other named Discharger (Lombardo) has failed to comply with the requirements of this Order.

REGULATORY STATUS

5. This Site is regulated by Site Cleanup Requirements under Board Order No. 92-052 (adopted May 20, 1992).

SITE HYDROGEOLOGY

6. The general direction of shallow ("A-Zone") groundwater movement reportedly is from south to north. Depth to groundwater originally was reported as about ten feet below the surface; at other times the depth has been reported as about 13 feet. An aquitard at 36-46 feet is interpreted to separate the uppermost "A" and underlying "B" Zones from each other. A deeper regional aquifer exists below a depth of about 200 feet, separated from the upper shallow aquifer(s) by fine-grained sediments. The lower aquifer is a major water-supply source.

REMEDIAL INVESTIGATION

7. Early Site work was of a limited extent. In 1981-1982 a preliminary Site investigation was conducted by a tenant while Gilmore Supply Company was the Site owner. Additional Site work apparently was accomplished by Gilmore Supply Company in 1983.

8. Soil and groundwater sampling revealed only metal pollutants; no VOCs were identified. The predominant metals were chromium, lead and zinc, with zinc having the highest concentrations. A total of 531 cubic yards of soil was excavated and removed in September 1983, after which additional soil testing was performed. At the conclusion of this work it was determined that metals pollution was detected in two environments: (a) soils with a "neutral" pH in the range of 6 to 8 units, and (b) soils with a significantly depressed pH (less than 6 units).

9. The early investigations showed concentrations of zinc and lead in shallow soils behind (north of) the former galvanizing facility (building), and beneath the building. Subsequent investigation indicated that zinc migrated deeper, and that lead appeared to attenuate within about five feet of the surface.

10. Where the pH was less than 6, metal concentrations, particularly zinc, were higher and extended deeper; when it was found that concentrations of lead and zinc increased with depth from 2,000 ppm (mg/kg) to 8,000 ppm (mg/kg) beneath the building used for galvanizing operations, the focus of the investigation shifted to groundwater.

11. Low pH values were found in borings at depths of about 25 feet, and were suspected to extend at least to the 30-foot level, suggesting that zinc pollution would also extend to a similar depth.

12. Following an effort to prepare a cleanup program and the removal of 531 cubic yards of polluted soil in 1983, the Gilmore Supply Company recommended to the Board that the Site be capped and a monitoring program implemented.

13. In 1984 the Board agreed to a cessation of soil characterization and remediation activities for a period of two years in order to conduct a quarterly groundwater monitoring program for the purpose of assessing impact to water quality. The program was initiated in 1985 and terminated in 1987. (Lombardo purchased the property in April 1985 - refer to Finding 3.)

14. The monitoring program indicated groundwater impact locally in the shallow "A" Zone in the immediate vicinity of the former galvanizing facility. In 1987 Lombardo (through its Consultant) recommended continuation of a modified groundwater monitoring program; no additional corrective action was proposed.

15. In April 1990 the Board requested a current status report for the Site and specifically concerning previously reported groundwater impact. Inasmuch as three years had elapsed since the last previous sampling event, Lombardo resampled certain wells prior to submitting a report.

16. It was confirmed in 1990 that high concentrations of zinc wer present in the shallow "A-Zone" groundwater immediately underneat the former galvanizing facility; some lateral migration of zinc w detected.

17. Following some additional Site soil characterization, it estimated that the main area of pollution contained approximat 3,000 cubic yards of zinc-impacted soil. Based on further analys Lombardo concluded that more Site work was necessary befor realistic remediation plan could be developed.

18. As a result of work accomplished in 1991, Lombardo reported t

    a. Soil pollution extended to a depth of about 30 feet, a previously determined, but the horizontal impact beneat former galvanizing facility was greater than prev surmised, particularly in the 15 to 20-foot depth zon

    b. Most of the zinc impact was within a zone 10-25 feet be surface in the vicinity of the former galvanizing fa

c. Data did not indicate either a lead or chromium problem;

d. In the northern part of the Site area the zinc impact was low to moderate, aerially variable and limited to the upper few feet of soil;

e. In the north-central part of the Site area the zinc impact was low to moderate, aerially variable and limited to the upper 13-18 feet of soil;

f. Neither the soil nor groundwater impact appeared to extend off-site.

19. The maximum concentrations of zinc reported (1991) were 34,000 ppm in soil and 369 ppm in groundwater. The MCL in drinking water is 5.0 mg/l (ppm).

20. Activities by Lombardo and others at this Site have identified on-site pollution sources and the vertical and lateral extent of pollution.

21. The Order adopted in 1992 required Lombardo to propose soil cleanup levels and submit plans to remediate soil and groundwater, presumably by conventional methods of soil treatment/removal and groundwater "pump-and-treat".

INTERIM REMEDIAL MEASURES

22. Following a 1991-1992 evaluation of all available information, Lombardo proposed a different approach for Site remediation, and in 1992 requested Board concurrence for an in-depth investigation by Lombardo of the feasibility of applying *in-situ neutralization* as a groundwater remediation methodology, instead of the "pump-and-treat" procedures typically used in Santa Clara County.

23. The Board agreed that Lombardo could investigate *in-situ neutralization* and its applicability to this Site. Lombardo began the process which would lead to conducting a pilot test to demonstrate the feasibility of groundwater remediation by *in-situ neutralization*.

24. Laboratory tests were conducted to determine a suitable neutralizing reagent, and several well-pairs were installed by Lombardo for field pilot-scale treatability testing.

25. The bench-scale treatability testing that was conducted from January 25 to February 2, 1995, focused on the feasibility of using ferrous sulfate and sodium bicarbonate to reduce dissolved zinc concentrations in groundwater.

26. Bench-scale testing reportedly indicated that treating Site groundwater with ferrous sulfate followed by sodium bicarbonate has a capability of reducing dissolved zinc concentrations to about 1 mg/L, or less. These reagents facilitate zinc adsorption onto iron precipitates, with both zinc and iron falling out of solution; the precipitate is expected to be stable over the long term.

27. Pilot-scale testing of several well-pairs was initiated June 8, 1995 and completed September 30, 1996. Reportedly, tests indicate that *in-situ neutralization* is effective in reducing concentrations of dissolved zinc. Lombardo recommends full-scale implementation of the procedure, as outlined in the Streamborn November 12, 1996 report.

28. *Remedial Action Plan*. The Discharger's (Lombardo's) remedial action (draft cleanup) plan/proposal consists of full-scale groundwater treatment by *in-situ neutralization*, capping areas of the property which have elevated concentrations of zinc in soil, and monitoring the groundwater. Lombardo anticipates that the concentration of zinc in groundwater will not exceed the MCL (5 mg/L) at the downgradient property boundary after treatment. The Board believes this proposal has merit. The implementation of this proposal requires that the existing Board Order be modified.

29. The Discharger (Lombardo) has submitted an interim remedial action workplan for full-scale *in-situ neutralization* and Site capping, and a tentative (estimated) schedule.

30. Lombardo plans to begin full-scale groundwater treatment in 1997 and continue this treatment into 1999, and to construct a "cap" over zinc-contaminated soil during the latter part of 1999. Groundwater monitoring will continue at least to the year 2000.

31. The Board accepts Lombardo's proposed remediation (draft cleanup) plan as a viable alternative, to be implemented subject to Prohibitions recited herein, and according to a schedule of Tasks, and other requirements as described in the Provisions of this Order.

BASIN PLAN

32. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on June 21, 1995. This updated and consolidated plan represents the Board's master water quality control planning document. The revised Basin Plan was approved by the State Water Resources Control Board and the Office of Administrative Law on July 20, 1995, and November 13, 1995, respectively. A summary of regulatory provisions is contained in 23 CCR 3912. The Basin Plan defines beneficial uses and water quality objectives for waters of the State, including surface waters and groundwaters.

33. The potential beneficial uses of the groundwater underlying an adjacent to the property include:

a. Industrial process water supply
b. Industrial service supply
c. Municipal and domestic supply
d. Agricultural supply

In this general area the deeper regional aquifer below a depth about 200 feet is a major water-supply source.

OTHER BOARD POLICIES

34. Board Resolution No. 88-160 allows discharges of extracted, treated groundwater from Site cleanups to surface waters only if it has been demonstrated that neither reclamation nor discharge to the sanitary sewer is technically and economically feasible. Lombardo's current draft cleanup plan does not require a discharge of extracted treated groundwater.

Board Resolution No. 89-39, "Sources of Drinking Water", defines potential sources of drinking water to include all groundwater in the region, with limited exceptions for areas of high TDS, low yield, or naturally-high contaminant levels.

STATE WATER BOARD POLICIES

35. State Water Board Resolution No. 68-16, "Statement of Policy with Respect to Maintaining High Quality of Waters in California", applies to a discharge of treated extracted groundwater, should this prove to be necessary at the subject Site, and requires attainment of background levels of water quality, or the highest level of water quality which is reasonable if background levels of water quality cannot be restored. Cleanup levels other than background must be consistent with the maximum benefit to the people of the State, not unreasonably affect present and anticipated beneficial uses of such water, and not result in exceedance of applicable water quality objectives.

State Water Board Resolution No. 92-49, "Policies and Procedures for Investigation and Cleanup of Discharges Under Water Code Section 13304", applies to any potential discharge at this Site. This Order and its requirements are consistent with provisions of Resolution 92-49, as amended.

PRELIMINARY CLEANUP GOALS

36. The Discharger will need to make assumptions about future cleanu standards for soil and groundwater, in order to determine necessary extent of remedial investigation, interim remedi actions, and the draft cleanup plan. Pending the establishment Site-specific cleanup standards, the following preliminary clean goals should be used for these purposes:

a. Groundwater: Applicable water quality objectives (e.g. maxi contaminant levels, or MCLs) or, in the absence of a chemi specific objective, risk-based levels (e.g. drinking w equivalent levels).

b. Soil: Cleanup goals for identified metals (zinc, chromium) to be based upon acceptable Preliminary Remedi Goals for contamination by metals (predominantly zinc) industrial setting, or suitable risk-based levels.

BASIS FOR 13304 ORDER

37. The Discharger has caused or permitted waste to be discharged or deposited where it is or probably will be discharged into waters of the State and creates or threatens to create a condition of pollution or nuisance.

COST RECOVERY

38. Pursuant to California Water Code Section 13304, the Discharger is hereby notified that the Board is entitled to, and may seek reimbursement for, all reasonable costs actually incurred by the Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order.

CEQA

39. This action is an Order to enforce the laws and regulations administered by the Board. As such, this action is categorically exempt from the provisions of the California Environmental Quality Act (CEQA) pursuant to Section 15321 of the Resources Agency Guidelines.

NOTIFICATION

40. The Board has notified the Discharger and interested agencies and persons of its intent under California Water Code Section 13304 to prescribe Site Cleanup Requirements for the discharge and has provided them with the opportunity for a public hearing and an opportunity to submit their written views and recommendations.

PUBLIC HEARING

41. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED, pursuant to Section 13304 of the California Water Code, that the Discharger (or its agents, successors, or assigns) shall cleanup and abate the effects described in the above findings as follows:

A. **PROHIBITIONS**

1. The discharge of wastes or hazardous materials in a manner which will degrade water quality or adversely affect the beneficial uses of waters of the State is prohibited.

2. Further significant migration of pollutants through subsurface transport to waters of the State is prohibited.

3. Activities associated with the subsurface investigation and cleanup which will cause significant adverse migration of wastes or hazardous substances are prohibited.

B. **TASKS**

1. **COMPLETION OF INTERIM REMEDIAL ACTIONS**

COMPLIANCE DATE: September 30, 2000

Submit technical reports acceptable to the Executive Officer documenting completion of sub-tasks identified in the workplan, such as:

Sub-task	Report Due Date
Submit Detailed Design and Full-Scale Treatment Plan	September 30, 1997
Install Wells	December 31, 1997
Dose Wells with Reagent(s)	June 30, 1999
Submit Site Cap Specifications	June 30, 1999
Complete Site Capping	December 31, 1999
Submit Project Status Reports	Quarterly (April 30, July 31, October 30, January 31), beginning Oct. 30, 1997
Submit Post-Treatment Confirmation Testing Reports	November 30, 1999 and May 31, 2000
Submit Remediation Summary Report	January 31, 2000
Submit Final Project Report	September 30, 2000

2. **PROPOSED FINAL REMEDIAL ACTIONS AND CLEANUP STANDARDS**

COMPLIANCE DATE: June 30, 2001

Submit a technical report acceptable to the Executive Office containing:

a. Results of the remedial investigation
b. Evaluation of the installed interim remedial actions
c. Risk assessment for current and post-cleanup exposures
d. Recommended final remedial actions and cleanup standards
e. Implementation tasks and time schedule

3. **Delayed Compliance:** If the Discharger is delayed, interrupted prevented from meeting one or more of the completion dates speci for the above tasks, the Discharger shall promptly notify Executive Officer and the Board may consider revision to this O

C. **PROVISIONS**

1. **No Nuisance:** The storage, handling, treatment, or disposal of polluted soil or groundwater shall not create a nuisance as defined in California Water Code Section 13050(m).

2. **Good Operation and Maintenance (O&M):** The Discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed to achieve compliance with the requirements of this Order.

3. **Cost Recovery:** The Discharger shall be liable, pursuant to California Water Code Section 13304, to the Board for all reasonable costs actually incurred by the Board to investigate unauthorized discharges of waste and to oversee cleanup of such waste, abatement of the effects thereof, or other remedial action, required by this Order. If the Site addressed by this Order is enrolled in a State Board-managed reimbursement program, reimbursement shall be made pursuant to this Order and according to the procedures established in that program. Any dispute raised by the Discharger over reimbursement amounts or methods used in that program shall be consistent with the dispute resolution procedures for that program.

4. **Access to Site and Records:** In accordance with California Water Code Section 13267(c), the Discharger shall permit the Board or its authorized representatives:

   a. Entry upon premises in which any pollution source exists, or may potentially exist, or in which any required records are kept, which are relevant to this Order.

   b. Access to copy any records required to be kept under the terms and conditions of this Order.

   c. Inspection of any monitoring or remediation facilities installed in response to this Order.

   d. Sampling of any groundwater or soil which is accessible, or may become accessible, as part of any investigation or remedial action program undertaken by the Discharger.

5. **Self-Monitoring Program:** The Discharger shall comply with the Self Monitoring Program as attached to this Order and as may be amended by the Executive Officer.

6. **Contractor/Consultant Qualifications:** All technical documents shall be signed by and stamped with the seal of a California registered geologist, a California certified engineering geologist, or a California registered civil engineer.

7. **Lab Qualifications:** All samples shall be analyzed by State-certified laboratories or laboratories accepted by the Board using appropriate EPA methods for the type of analysis to be performed. The laboratories shall maintain quality assurance/quality control (QA/QC) records for Board review. This provision does not ap

analyses that can only reasonably be performed on-site (e.g. temperature).

8. **Document Distribution:** Copies of all correspondence, technical reports, and other documents pertaining to compliance with this Order shall be provided to the following agencies:

   a. City of Santa Clara
   b. County of Santa Clara, Health Department
   c. Santa Clara Valley Water District

   The Executive Officer shall receive one complete copy of all correspondence, reports, and documents pertaining to compliance with this Order, and may modify this distribution list as needed.

9. **Reporting of Changed Owner or Operator:** The Discharger shall file a technical report on any changes in Site occupancy or ownership associated with the property and facility described in this Order.

10. **Reporting of Hazardous Substance Release:** If any hazardous substance is discharged in or on any waters of the State, or discharged and deposited where it is, or probably will be discharged in or on any waters of the State, the Discharger shall report such discharge to the Regional Board by calling (510) 286-1255 during regular office hours (Monday through Friday, 8:00 to 5:00).

    A written report shall be filed with the Board within five (5) working days. The report shall describe: the nature of the hazardous substance, estimated quantity involved, duration of incident, cause of release, estimated size of affected area, nature of effect, corrective actions taken or planned, schedule of corrective actions planned, and persons/agencies notified.

    This reporting is in addition to reporting to the Office of Emergency Services required pursuant to the Health and Safety Code.

11. **Rescission of Existing Order:** This Order supersedes and rescinds Order No. 92-052.

12. **Periodic SCR Review:** The Board will review this Order periodically and may revise it when necessary. The Discharger may request revisions and upon review the Executive Officer may recommend that the Board revise these requirements.

I, Loretta K. Barsamian, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region, on August 20, 1997.

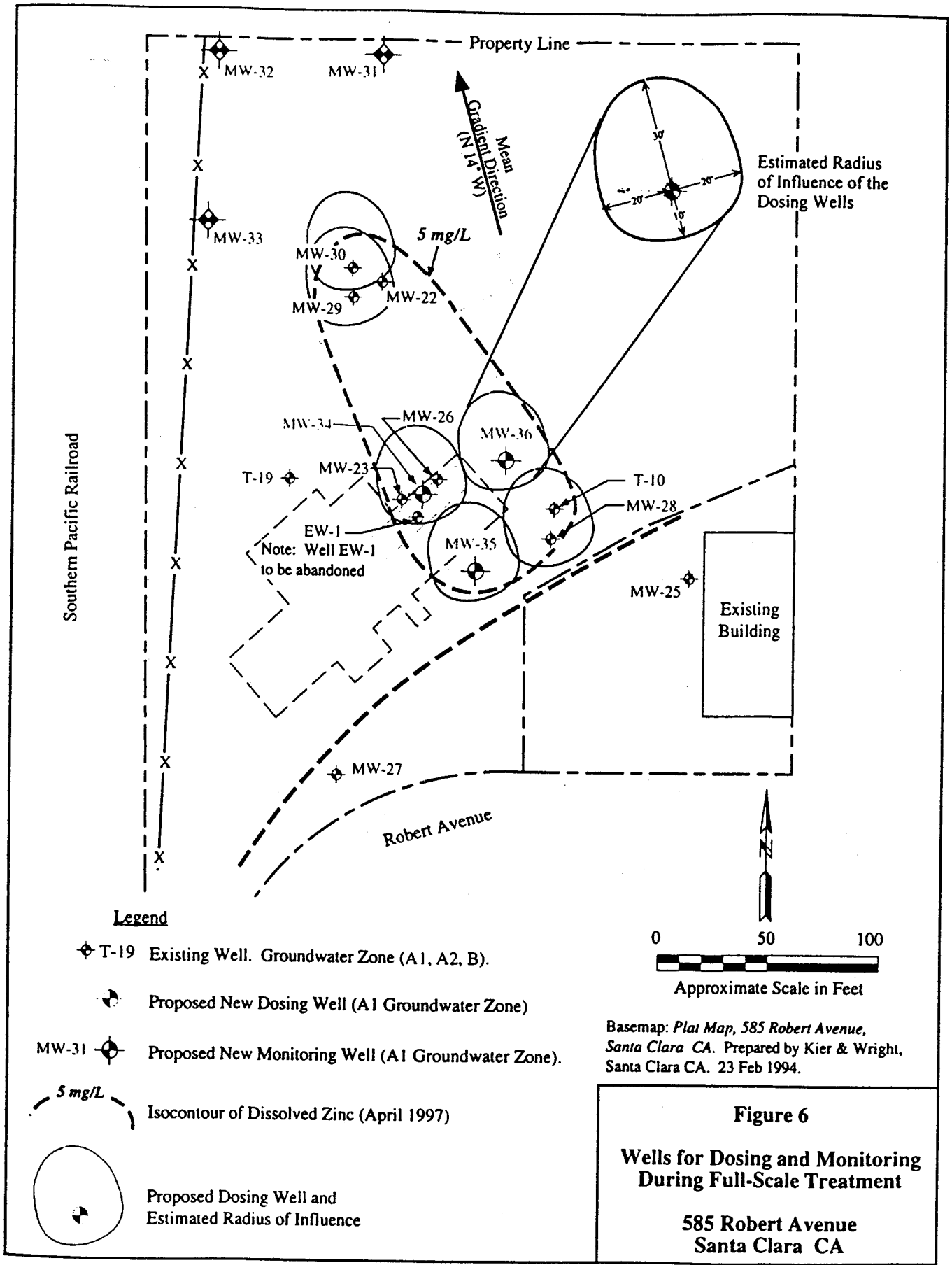
Loretta K. Barsamian
Executive Officer

FAILURE TO COMPLY WITH THE REQUIREMENTS OF THIS ORDER MAY SUBJECT YOU TO ENFORCEMENT ACTION, INCLUDING BUT NOT LIMITED TO IMPOSITION OF ADMINISTRATIVE CIVIL LIABILITY UNDER WATER CODE SECTION 13268 OR 13350, OR REFERRAL TO THE ATTORNEY GENERAL FOR INJUNCTIVE RELIEF OR CIVIL OR CRIMINAL LIABILITY.

Attachments:

Site Map

Self-Monitoring Program



Basemap: *Plat Map, 585 Robert Avenue, Santa Clara CA.* Prepared by Kier & Wright, Santa Clara CA. 23 Feb 1994.

Figure 6

Wells for Dosing and Monitoring During Full-Scale Treatment

585 Robert Avenue
Santa Clara CA

SITE MAP

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM FOR:

LOMBARDO DIAMOND CORE DRILLING COMPANY, INC.,
AND GILMORE SUPPLY COMPANY

FOR THE PROPERTY LOCATED AT:
585 ROBERT AVENUE, SANTA CLARA
SANTA CLARA COUNTY

1. **Authority and purpose:** The Board requests the technical reports required in this Self-Monitoring Program pursuant to Water Code Sections 13267 and 13304. This Self-Monitoring Program is intended to document compliance with Board Order No. 97-101 (site cleanup requirements).

2. **Monitoring:** The Discharger shall measure groundwater elevations and collect and analyze representative samples of groundwater according to the following schedule:

Well #	Sampling Frequency	Analyses	Well #	Sampling Frequency	Analyses
MW-31	Q	pH,metals	MW-22	S	pH,metal
MW-32	Q	pH,metals	MW-26	S	pH,metal
MW-33	Q	pH,metals	T-19	S	pH,metal
MW-25	A	pH,metals	MW-27	A	pH,metal

Key: Q=Quarterly (April 30, July 31, Oct. 30, Jan. 31);
S=Semi-annually (April 30, Oct. 30);
A=Annually (Oct. 30);
metals (dissolved)=zinc, lead, chromium.

The Discharger shall sample any new monitoring or extraction wells quarterly and analyze groundwater samples for the same constituents as shown in the above table. The Discharger may propose changes in the above table; any proposed changes are subject to Executive Officer approval.

3. **Quarterly Monitoring Reports:** The Discharger shall submit quarterly monitoring reports to the Board no later than 30 days following the end of the quarter (e.g. report for first quarter of the year due April 30). The first quarterly monitoring report shall be due on October 30, 1997. The report shall include:

a. Transmittal Letter: The transmittal letter shall discuss any violations during the reporting period and actions taken or planned to correct the problem. The letter shall be signed by the Discharger's principal executive officer or his/her duly authorized representative, and shall include a statement by the official, under penalty of perjury, that the report is true and correct to the best of the official's knowledge.

b. Groundwater Elevations: Groundwater elevation data shall be presented in tabular form, and a groundwater elevation map should be prepared for each monitored water-bearing zone. Historical groundwater elevations shall be included in the fourth quarterly report each year.

c. Groundwater Analyses: Groundwater sampling data shall be presented in tabular form, and an isoconcentration map should be prepared for one or more key contaminants for each monitored water-bearing zone, as appropriate. The report shall indicate the analytical method used, detection limits obtained for each reported constituent, and a summary of QA/QC data. Historical groundwater sampling results shall be included in the fourth quarterly report each year. The report shall describe any significant increases in contaminant concentrations since the last report, and any measures proposed to address the increases. Supporting data, such as lab data sheets, need not be included (however, see record keeping - below).

d. Groundwater Extraction: If applicable, the report shall include groundwater extraction results in tabular form, for each extraction well and for the site as a whole, expressed in gallons per minute and total groundwater volume for the quarter. The report shall also include contaminant removal results, from groundwater extraction wells and from other remediation systems (e.g. soil vapor extraction), expressed in units of chemical mass per day and mass for the quarter. Historical mass removal results shall be included in the fourth quarterly report each year.

e. Status Report: The quarterly report shall describe relevant work completed during the reporting period (e.g. site investigation, interim remedial measures) and work planned for the following quarter.

4. **Violation Reports:** If the Discharger violates requirements in Site Cleanup Requirements, then the Discharger shall notify the Board office by telephone as soon as practicable once the Discharger has knowledge of the violation. Board staff may, depending on violation severity, require the Discharger to submit a separate technical report on the violation within five working days of telephone notification.

5. **Other Reports:** The Discharger shall notify the Board in writing prior to any site activities, such as construction or underground tank removal, which have the potential to cause further migration of contaminants or which would provide new opportunities for site investigation.

6. **Record Keeping:** The Discharger or his/her agent shall retain data generated for the above reports, including lab results and QA/QC data, for a minimum of six years after origination and shall make them available to the Board upon request.

7. **SMP Revisions:** Revisions to the Self-Monitoring Program may be ordered by the Executive Officer, either on his/her own initiative or at the request of the Discharger. Prior to making SMP revisions, the Executive Officer will consider the burden, including costs, of associated self-monitoring reports relative to the benefits to be obtained from these reports.

I, Loretta K. Barsamian, Executive Officer, hereby certify that this Self-Monitoring Program was adopted by the Board on August 20, 1997.

Loretta K. Barsamian
Executive Officer